USE OF VALUE ENGINEERING IN THE CORPS' SECTION 22, PLANNING ASSISTANCE TO STATES PROGRAM

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INTRODUCTION

The Corps of Engineers' **"Planning Assistance to States"(PAS) Program**, also referred to as **"Section 22"** authorizes the use of Corps technical expertise to assist non-federal agencies for the development of comprehensive water resource plans. Eligible participants include state, county and municipal agencies as well as universities and federally recognized Indian tribes. Work under this program can be **cost-shared on a 50-50 basis** between the federal government and non-federal participants which, in many cases, makes this an attractive venture.

The program is relatively small (as federal programs go) but its continued successful use indicates potential for strong future growth. Value Engineering services have recently been provided under PAS and would appear to be a very marketable element of the current and future program.

THE PAS PROGRAM

The PAS program originated in Section 22 of the Water Resource Development Act (WRDA) of 1974. Significant revisions to funding limits and cost-sharing were made in WRDA 1996. The program allows the Corps of Engineers to perform a wide array of studies and other planning functions as part of local water resource development plans. It does not allow actual design, construction of projects nor services outside of the water resource development arena. Categories of studies that have been performed to date include:

- Flood damage reduction
- Flood hazard mitigation
- Environmental/Recreational
- GIS Mapping/Planning
- Hydrology
- Water treatment plant performance
- Groundwater source and wastewater discharge inventory
- Value Engineering/Analysis

PAS studies are unique and generally differ form 'traditional' Corps studies. Studies done for major Corps projects often require long study duration and significant cost. PAS studies are the exact opposite as they usually are performed in a matter of months and are relatively inexpensive. In fact, most PAS studies are initiated and completed well within a calendar year. Agreement documents and cost-sharing mechanisms are very simple relative to other federal endeavors.

Funding for PAS studies are shared 50-50 between the federal government and the local sponsor. Non-Federal participants must provide up front cash and cannot provide in-kind services or other federal funds for their share. **There is a current annual limitation of $500,000 (federal dollars) per state or Indian tribe.** The total federal PAS budget for FY99 was $6.3 million. While both these amounts are relatively small, they have grown as demand has increased.

Several Corps districts have outstanding PAS programs. The New Orleans District (NOD) is an example. The NOD Program has successfully provided PAS services to a wide range of customers. In recent years services have only been restricted by the $500,000 annual limit. Repeat customers are the norm, and program successes have resulted in requests for use of other Corps services. The District's success has primarily been due to management commitment to utilize PAS as a high quality outreach program.

VALUE ENGINEERING IN THE PAS PROGRAM

Value Engineering/Analysis (V-E) studies may be performed under PAS for water resource related projects. While many state and local agencies do some form of cost control on their major projects, very few actually perform formal V-E studies. **So even at 'half price' why should local agencies do V-E?** Established V-E programs in both federal and non-federal agencies have a well documented proven track record for both direct project cost savings and cost growth avoidance. In fact, many programs produce over a 20:1 ratio of long term savings versus program costs. When used selectively on projects, the rate of return is usually much higher. Regardless of cost savings, a V-E study is a very inexpensive way to validate a proposed project plan, perform some technical review, and accomplish needed project coordination. It demonstrates conscious efforts by officials to ensure taxes are expended in the most cost effective manner possible and helps to sell projects to local taxpayers.

Why use the Corps? The Corps can provide a professionally strong, independent 'third party' evaluation, using its access to vast world-wide, in-house, other federal agency and A/E expertise to suit virtually any technical need. The Corps' ***OVEST Team***, an organization consisting of high-graded multi-disciplined professionals, is solely dedicated to performing V-E, and has an unparalleled record of VE accomplishments. The Corps has numerous private architect and engineering (A/E), indefinite delivery contracts, which can be utilized to insure timely delivery of any service or professional need. While

the use of non-Corps staff was discouraged during the earlier years of the program, recent policy changes encourage private outsourcing, and has made it possible to use A/E contractors on PAS studies. **The PAS cost-shared VE creates new and additional work for the private sector, as many cities, counties, and states still do not realize the potential of properly performed VE studies.** The NOD has, in recent years, successfully utilized both private A/E contractors, and staff from other federal agencies, to perform a wide variety of PAS studies.

V-E/PAS CASE STUDY

The NOD recently performed V-E studies for the ***City/Parish of East Baton Rouge, Louisiana*** under the PAS program. Two V-E studies were performed on the City/Parish's proposed $491 million sewer overflow corrective action plan. The project planning phase had been completed, and the City/Parish desired an independent V-E study effort to help validate the project before it proceeded further. The V-E team was headed by the Corps' ***OVEST Team*** and included staff from the NOD, and the District's A/E contractor for V-E studies, ***Dames&Moore***. City/Parish staff and the project design A/E, ***Montgomery-Watson,*** actively participated in the studies. Valuable assistance was also provided from the ***Corps' Tulsa District and City of Tulsa staff***. The studies succeeded in validating the overall design plan and adding several improvement features. Pending further field testing and EPA/DEQ approvals, study proposals may also produce significant project cost savings. **The total study effort, from agreement preparation to final documentation, was accomplished in just over four months.**

SUMMARY

Given its successful utilization by a number of Corps districts, the PAS program may be poised for significant expansion. Value Engineering services can be a very marketable part of this program, by aiding state and local governments in project review, controlling project costs and producing additional work for the private A/E community.

For more information on the Corps' V-E and/or PAS programs, please contact your local Corps District, or the New Orleans District PAS/V-E program managers:

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